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003/005

**PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q77024

Shoichiro YASUNAMI, et al.

Appln. No.: 10/642,291

Group Art Unit: 1752

Confirmation No.: 2020

Examiner: John S.Y. Chu

Filed: August 18, 2003

For: **NEGATIVE RESIST COMPOSITION**

DECLARATION UNDER 37 C.F.R. § 1.132

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Koji Shirakawa, hereby declare and state:

THAT I am a citizen of Japan;

I graduated from Shizuoka University, the department of Engineering, Course of Applied Chemistry in March 1991.

Since April 1991 I have been employed by Fuji Photo Film Co., Ltd. (now FUJIFILM Corporation) and have been engaged in research and development of photo resist formulations for semiconductors at the Yoshida-Minami Factory Research Division of the company.

Additional Experiment

The additional experiment in which all conditions such as composition ratio and evaluation method except for changing the cross-linking agent MM-3 as the component (B-1)

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with 1,3,5-tris(α -hydroxyisopropyl) benzene are the same as Example 3 of the present application was conducted.

	Sensitivity ($\mu\text{C}/\text{cm}^2$)	Resolution (μm)	Pattern Profile Evaluation on 1-to-3 Scale	Line Edge Roughness (nm)
Example 3 of the present application	4.8	0.11	rectangular	5.5
Additional Experiment	6.0	0.13	taper	11.0

In the Additional Experiment, compound (C-2) of the Kai et al reference US 2003/0022095 A1 was used in place of phenol compound MM-3. Compound MM-3 is within definition (B-1) of the present claims (see page 74 of the present application), while compound (C-2) is not. Both compounds were used in combination with a cross-linking agent CL-4 (see page 41 of the present application) within definition (B-2) of the present claims.

In my opinion, the comparison of the results obtained with Example 3 of the present application compared with those of the Additional Experiment establishes the unexpected superiority of the claimed invention over the Kai et al reference in combination with the secondary references cited in the Office Action dated January 3, 2008.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States

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Code, and that such willful false statements may jeopardize the validity of the application or any
patent issuing thereon.

Date: 03/27/08

Koji Shirakawa
Koji Shirakawa

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Date: _____

Koji Shirakawa